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# Macroeconomic Policies for Resource-Rich Countries

At a superficial level, the design of macroeconomic policy for resource-rich countries would seem a simple task. The policy goals should be quite obvious: strong growth, economic diversification and poverty reduction. With rare exceptions, these countries are not constrained by the supply of foreign exchange, nor should the governments be budget constrained. The combination of obvious goals and relative lack of constraints would seem to be a recipe for success.

But appearances are misleading. Many resource-rich countries have failed to achieve growth, diversification and poverty reduction compared to countries without natural resource endowments. Researchers have offered ostensible analytical accounts of the frequent failures to achieve the development potential that should accompany natural resource endowments. The Dutch Disease, described above, is one of these stories, and in recent years, some discussions of corruption and conflict have been influential. Although methodologically problematic, researchers have argued that resource-rich economies do not experience stable and sustained growth over time (Sachs & Warner, 2001)[1]. High rates of poverty and inequality are common (Ross, 2007)[2]. Resource wealth typically aggravates the onset, intensity and duration of conflict (Collier & Hoeffler, 2004)[3].

Indonesia is among the few exceptions in terms of diversifying its economy. Petroleum became a minor contributor to foreign exchange earnings. The share of oil and gas in domestic revenues *declined* from 49 per cent in 1982 to 23 per cent in 2005. Two major policies contributed to this success: (a) direct support to agriculture and industry (mainly manufacturing textiles and footwear) through subsidies and tax incentives; and (b) at a later stage, careful transitions from import substitution to export-led growth.

The examples at the other extreme are Nigeria and Yemen, which are dependent on petroleum for over ninety percent of their exports. Botswana also suffers from high unemployment, related to reliance on capital-intensive diamond mining and cattle exports. The economy is not adequately diversified. Labour-intensive manufacturing still contributes no more than 4 to 5 per cent of GDP. The total unemployment rate averaged 22 per cent for the two decades leading up to 2006. The youth unemployment rate was 33 per cent.

As Brunnschweiler and Bulte (2008, p. 617)[4] note, however: "economic advisors should be aware that natural resources do not necessarily spell doom for development. Instead, their exploitation can be a valuable part of a sustainable development strategy". It is our hypothesis that the failure to realize the development promise of natural resource endowments is the result of inappropriate macroeconomic policy.

Our argument is that resource-rich countries experience frequent periods of dramatic foreign exchange inflows. These periods of dramatic price increases result in sudden appreciations of their currencies, unless the public authorities prevent it. This appreciation undermines the profitability of all other tradeable goods, which results in a decline of manufacturing and agriculture. This is not the Dutch Disease process, which is specified in the analytical context of full employment, then transferred – inappropriately – to economies with substantial resources.

Public authorities need to intervene to prevent the market distortions created by the resource boom. The major tasks of macroeconomic policy in the short term are preventive: preventing excessive overheating of the economy, preventing appreciation of the exchange rate, and preventing relative price changes that would make the short term a precursor of the medium term with declining tradeable sectors.

Fiscal policy should be carried out with a discipline that prevents excessive increases in aggregate demand and accumulates a reserve of revenue that can be drawn upon when export prices fall. There is plenty of experience in this area. For instance, Timor Leste followed the Norwegian model and set up a Petroleum Fund in 2005. The fund is expected to total US$ 8 billion by 2012 (Gomes & Hailu, 2009)[5]. In Angola, revenues generated by an oil price higher than the "reference level" are not spent, but deposited in an oil reserve fund. While saving a portion of revenues might make sense, excessively diverting resources away from critical investments is not developmental, especially in the least-developed countries where public investments are crucially needed.

On the revenue side, income from the resource sector needs to be maximized. However, there are many challenges. Multinational companies often negotiate "lock-in contracts" with low royalty and tax rates. These contracts are meant to deal with the so-called "time-inconsistency problem": the notion that there is uncertainty as to whether agreements are honoured or reversed in the future. In Peru, companies have been able to negotiate fixed tax rates for up to 10 years. The experiences of Zambia and Chile provide a good example of contrasts. In Chile, the state-owned company holds a 39 per cent stake in the mining sector. The company pays a 29 per cent tax rate. In contrast, the Zambian government holds a nominal 10 per cent stake in Anglo-American, with no dividends received up to 2007. The estimates show that Zambia loses about US$ 50 million per annum in foregone tax revenues due to exemptions, concessions, refund claims and provisions (Bova, 2009; Fraser & Lungu, 2007)[6 7].

Monetary policy often supports fiscal policy through use of the central bank rate to restrain credit. However, the central bank rate is not always an effective instrument. Attempts to constrain credit growth may result in dysfunctionally high commercial bank rates that undermine productive investment. To complement a policy of moderately high interest rates, the central bank can employ instruments that act on the balance sheets of commercial banks and influence their capacity to expand credit. Regulation of reserves is a useful approach.

Exchange rate policy is straight-forward; the strategy is managing the currency to prevent appreciation. With foreign exchange reserves, maintaining a fixed exchange rate is a relatively easy task. There is potential conflict between the central bank constraining credit growth and entering into foreign exchange purchases to manage the currency. As noted above, acting on commercial bank balance sheets is the mechanism to manage this conflict.

In the medium-term, fiscal policy plays the most important role. Public investment becomes the major instrument to promote the central policy objective – growth and diversification of the non-resource tradeable sectors. Provision of infrastructure should focus on directly facilitating tradeable production. One of the most frequent and obvious symptoms of a dysfunctional resource-rich economy is the construction boom. Investments in trade related transport and technical education to support agriculture and manufacturing are some of the alternative public investments that can foster tradeables.

On the revenue side, policies need to focus on broadening the tax base and introducing direct taxes. Reducing excessive inequality creates a virtuous cycle of increases in household incomes. This would enlarge the domestic market by raising consumption and stimulating labour demand. These, in turn, would increase income and public revenue (Hailu & Soares, 2009)[8].

Monetary policy needs to focus on facilitating private investment to diversify into non-resource tradeables and to support exchange rate management. Chile has been successful in its economic diversification strategy. While mining makes up about two-thirds of exports, it only employs less than one per cent of the labour force. The strategy entailed policy incentives to the private sector designed to promote wine-making, fruit-culture and salmon farming. These included credit and subsidies for these sectors as well as support for R&D spending (Hailu, *et al.*, 2011; Havro & Santiso, 2008)[9] [10].

A free floating exchange regime is not likely to work in protecting the non-resource tradeable sectors. The policy need is to focus on maintaining a constant real exchange rate to diversify into other non-resource tradeables. The recent international food price increases indicate that global demand for agricultural products presents new export opportunities. Uzbekistan's experience provides another appropriate policy lesson. The country experienced shocks due to declines in the price of its major exports, mainly energy. The policy makers, however, took actions to diversify the country's exports. Between the periods 1995 to 1999 and 2003 to 2006, non-oil exports as a share of total exports had increased by 12 per cent. Investments in domestic agriculture led to a decrease in the share of food in total imports from 22 per cent to 9 per cent (McKinley, 2008)[11].

The basic elements of the macroeconomic policy framework for resource-rich economies are given in Table 1 of the Appendix.

## Country-Specifics and Limitations in Implementation

The feasibility and success of macroeconomic policy will depend on specific policy designs adapted to each country's unique characteristics. This caveat applies to countries that may have many features in common. For example, Nigeria and Cameroon are both petroleum exporters, but the former can exercise an independent monetary policy while the latter cannot. The constraint arises because of currency arrangements. In the less flexible form, as in the case of Cameroon, a country adopts the currency of another country or enters a common currency agreement, such as in the CFA or franc (now euro) zone in West Africa. The more flexible form of this constraint is a fixed link to another currency, such as the arrangement between Lesotho and South Africa.

The practical result of such currency arrangements is that the major monetary and exchange rate tools are not available. All that remains of monetary policy is a limited scope to issue bonds and conduct financial sector oversight. Fiscal policy is also limited, restricted to allocation of expenditure and to the adjustment of tax coverage and rates. Even without a formal deficit rule, financing expenditures is difficult with a common currency because of restrictions on issuing bonds. The macroeconomic guidelines developed in this paper, therefore, do not fully apply to the countries constrained by currency agreements.

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**<u>Table 1</u>**
**Macroeconomic Policy Options for Resource-Rich Countries**

| | | Objectives and Actions | Comments |
|---|---|---|---|
| Short-Term | **Fiscal Policy** | *Expenditure*: Prevent over-heating and create a reserve fund for countercyclical intervention and investment.<br><br>*Revenue*: Maximize income from resource flows by setting appropriate royalties and tax rates. | Major task is to restrain recurrent expenditure.<br><br>Vigilance is required to prevent revenue loss from transfer pricing and other tax evasion mechanisms. |
| | **Monetary Policy** | Use central bank rate and regulation of commercial bank reserves to prevent excessive inflationary pressures. | Private sector investment in non-tradable sectors may be the main source of inflationary pressure. |
| | **Exchange Rate Policy** | Employ fixed exchange rate regime to prevent nominal appreciation. | Immediate task may be to tackle trade deficit. |
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| Medium-Term | **Fiscal Policy** | *Expenditure*: Public investment to encourage and facilitate diversification into non-resource tradeables.<br><br>*Revenue*: Broaden direct tax base; prevent excessive inequality. | Typical problem in resource-rich countries is the relative or absolute decline of non-resource tradeables.<br><br>Challenges to policy include inequality, corruption and failure to diversify tax base. |
| | **Monetary Policy** | Facilitate private investment to diversify into non-resource tradeables and support exchange rate management. | Central banks need to balance monetary expansion, with the fixed real exchange rate, from overheating pressures. |
| | **Exchange Rate Policy** | Maintain constant real exchange rate to diversify tradeables. | Key to successful long-term development. |